Traffic Control Standard # 10

Steel Poles for Traffic Signals

Revised August 16, 2006

Poles shall be supplied as described in the following specifications and as shown in **Figure 1** (**Stock #14-12-1320, #14-12-1330**, and **#14-12-1340**). The pole height and type shall be specified on each order.

Pole shafts shall have a base diameter of approximately 11" (11-3/4" maximum) and tapered to 8"(±1/2") diameter at the top. A standard removable cap shall be suitable to cover all shafts with diameters varying from 7-1/2" to 8-1/2".

Poles shall be provided with a handhole located approximately 18" above the base with approximate dimensions of 4" x 6-1/2". The handhole shall be provided with a cover that is restrained to the pole with a 15" - #35 stainless steel chain fastened to both the cover and to the inside of the handhole in a fashion such that the chain will be inside the pole. The manufacturer's name and pole height shall be stenciled on the cover and the base, and be both readable from the outside of the pole and legible after galvanizing. The handhole strain bar shall be formed in such a manner to provide a mechanical lock against the handhole in order to prevent turning. No obstructions shall be in the handhole with the cover removed. A grounding nut (1/2" - 13NC) shall be welded to the inside of the shaft 90˚ left and horizontal from the handhole. A grounding lug shall be provided with each pole (Fargo GC202 or approved equal).

Poles shall have a 1" and a 3" boss centered on a horizontal line 18" from the base. When facing the bosses, the 1" boss shall be a maximum of 35˚ to the right of the 3" boss. A wire way shall be provided through two (2) 3" and one (1) 1" boss provided in the shaft 18" below the top of the shaft. The 3" bosses shall be located 180˚ from the handhole. The poles shall be shipped with all bosses plugged by using galvanized steel conduit plugs installed to full thread depth. The handhole and the 3" boss mentioned above shall be centered on one (1) edge of the base plate.

All pole hardware, including leveling and cap nuts, shall be packaged together on a per pole basis. Pole base plates, anchor bolts, hex nuts, and washers shall have design and dimensions as shown in both **Figure 1** and **Figure 2**, respectively. Both hex and cap nuts shall be 2-5/8" across the flats. Cap nuts shall have a maximum dome height of 1-3/4" with an inside clearance of 1/2" between the threads and the top of the dome. All anchor bolts, with hex nuts and washers, shall be banded in bundles of four (4) and supplied with each pole. The handhole cover shall be securely fastened to the pole for shipment. In addition, one (1) additional anchor bolt shall be supplied with each order.

Poles shall meet the following specified deflection:

Deflection Table

Pole Length (Ft)	Max. Deflection (In/100#)
26	0.25
28	0.30
30	0.38

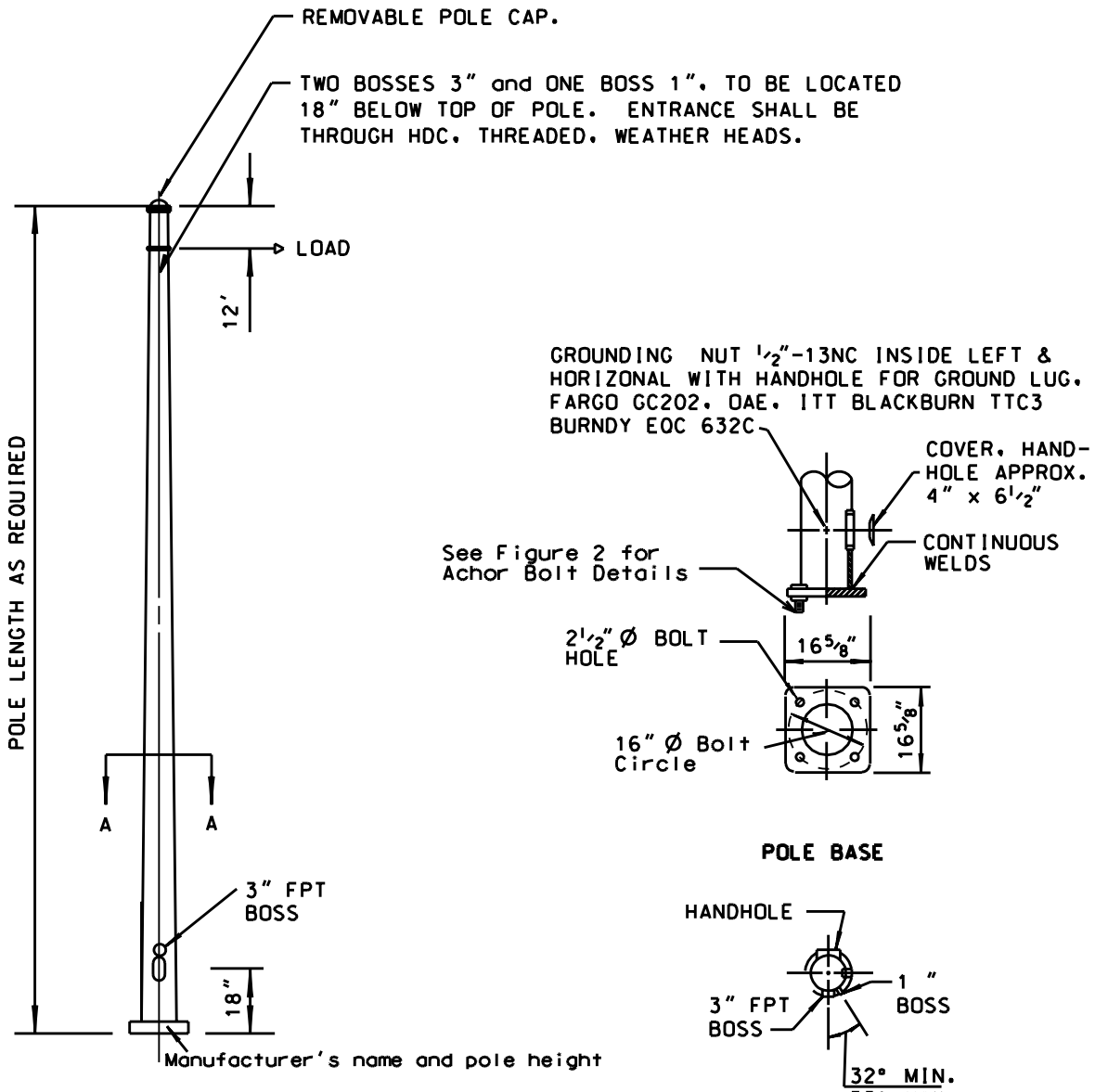
The underside of each pole base plate shall be painted to identify pole height as follows:

Color Table

Pole Height (Ft)	Color
26	Yellow
28	Red
30	Green

All edges of equipment shall be deburred and smooth. All material shall be hot dipped galvanized.

All material shall conform to applicable subsections of Section 1013 in the Louisiana Standard Specifications for Roads and Bridges. The vendor will follow the requirements directed to the contractor.

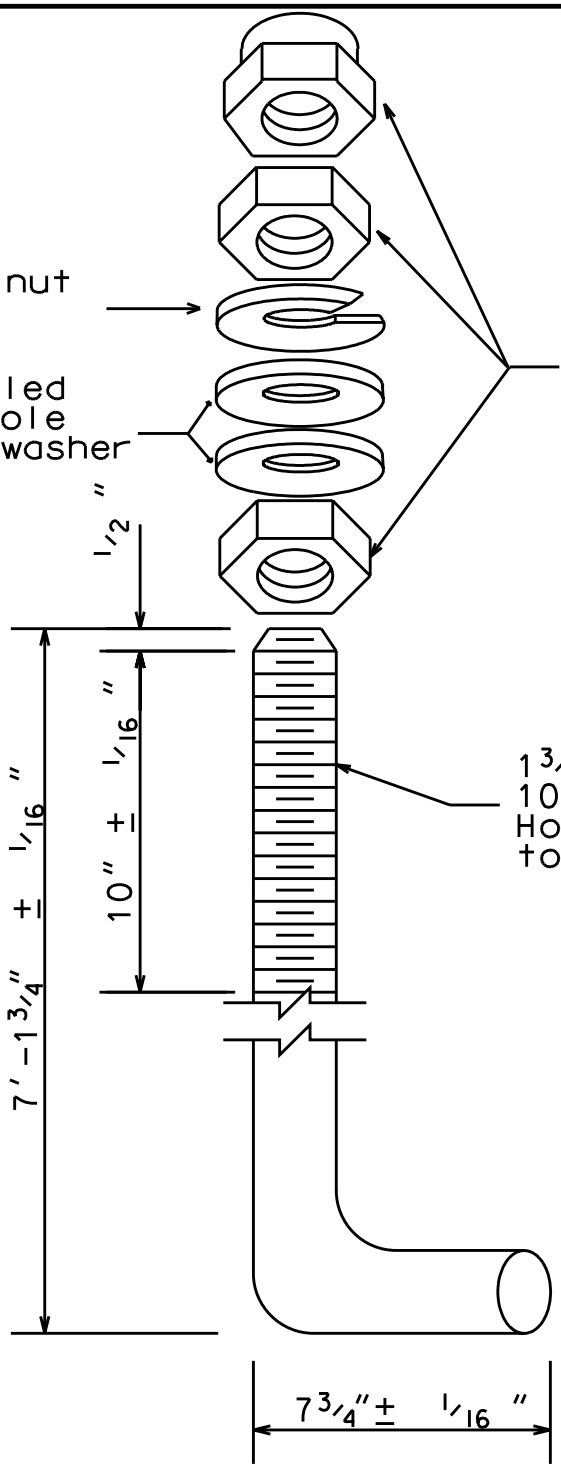


NOTES:

1. All poles and hardware shall be hot dipped. galvanized. steel.
2. Steel pole baseplates shall have a 16" diameter bolt circle.
3. Steel poles shall have a minimum design load of 4000 pounds.
4. Hardware shall confrom to ANSI/ASME standards and be of A193-B7 Grade steel.
5. See TCS #10 written specifications for more information.

STK.#14-12-1320 (26')
STK.#14-12-1330 (28')
STK.#14-12-1340 (30')

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DDEVELOPMENT
TRAFFIC CONTROL STANDARD NO. 10
TRAFFIC SIGNAL STEEL STRAIN SUPPORT POLE FIGURE 1
DRAW BY: MAA DATE: 08/16/06



NOTES:

1. Material shall be Hot Dipped Galvanized, steel
2. Dimensions and material shall conform to ANSI/ASME standards be of A193-B7 Grade steel.
3. SEE TCS #10 written specifications for more information.

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
TRAFFIC CONTROL STANDARD NO. 10
STEEL STRAIN POLES - ANCHOR BOLT DETAILS FIGURE 2
DRAWN BY: MAA DATE: 08/16/06